

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	Raju, Jeyaseelan		
Application No.:	N/A	Group No.:	N/A
Filed:	Herewith	Examiner:	N/A
For:	NOVEL CARC PROTEIN AND NUCLEIC ACID MOLECULES AND USES THEREFOR		

Mail Stop DD
Commissioner for Patents
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TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT

IDENTIFICATION OF TIME OF FILING THE ACCOMPANYING
INFORMATION DISCLOSURE STATEMENT

The information disclosure statement submitted herewith is being filed:

☒ Within three months of the filing date of the application or date of entry into the national stage of an international application or before the mailing date of a first Office action on the merits, whichever event occurs last. 37 C.F.R. section 1.97(b).

OR

☐ *After* three months of the filing date of this national application or the date of entry of the national stage as set forth in Section 1.491 in an international application or after the mailing date of the first Office action on the merits, whichever event occurred last but *before* the mailing date of either:

CERTIFICATION UNDER 37 C.F.R. SECTIONS 1.8(a) and 1.10*

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37 C.F.R. SECTION 1.8(a)

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Sean Hunziker

(type or print name of person certifying)

Date: July 24, 2003

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Practitioner's Docket No. MPI98-105P1RCP2DV1M

- (1) a final action under Section 1.113,
- (2) a notice of allowance under Section 1.311, or
- (3) an action that otherwise closes prosecution in the application

whichever occurs first.

[] Accompanying this transmittal is the fee set forth in 37 C.F.R. Section 1.17(p) for submission of an information disclosure statement under Section 1.97(c). (\$180.00).

[] Each item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. 37 C.F.R. Section 1.97(e)(1).

[] No item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application and to the knowledge of the person signing the statement after making reasonable inquiry, was known to any individual designated in Section 1.56(c) more than three months prior to the filing of the information disclosure statement. 37 C.F.R. Section 1.97(e)(2).

OR

[] The information disclosure statement transmitted herewith is being filed *after* a final action under Section 1.113, or a notice of allowance under Section 1.311, whichever occurs first, but before, or simultaneously with, the payment of the issue fee.

[] In accordance with the requirements of 37 C.F.R. Section 1.97(d):

A. [] Accompanying this transmittal is the fee set forth in 37 C.F.R. Section 1.17(p) for submission of an information disclosure statement under Section 1.97(c). (\$180.00).

B. [] Each item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. 37 C.F.R. Section 1.97(e)(1).

C. [] No item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application and to the knowledge of the person signing the statement after making reasonable inquiry, was known to any individual designated in Section 1.56(c) more than three months prior to the filing of the information disclosure statement. 37 C.F.R. Section 1.97(e)(2).

Practitioner's Docket No. MPI98-105P1RCP2DV1M

FEE PAYMENT

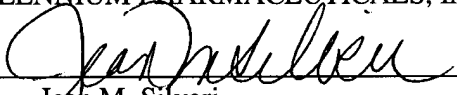
3. ☐ The fee due is set forth in 37 C.F.R. Section 1.17(p) for submission of an information disclosure statement under Section 1.97(c) (\$180.00).

☒ Applicant believes no fee is due in connection with this submission.

		Fee due	\$0.00
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4. <input type="checkbox"/> Attached is a check in the amount of \$ _____.			
<input type="checkbox"/> Charge Account No. 501668 in the amount of		\$0.00	.

☐ A duplicate of this request is attached.

If any additional fees are due, please charge Account 501668.

<u>July 24, 2003</u>	MILLENNIUM PHARMACEUTICALS, INC. By  Jean M. Silveri Registration No. 39,030 75 Sidney Street Cambridge, MA 02139 Telephone - 617-679-7336 Facsimile - 617-551-8820
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Raju, Jeyaseelan
Application No.: N/A Group No.: N/A
Filed: Herewith Examiner: N/A
For: NOVEL HARP-1 PROTEIN AND NUCLEIC ACID MOLECULES AND USES
THEREFOR

Mail Stop DD
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

List of Sections Forming Part of This Information Disclosure Statement

The following sections are being submitted for this Information Disclosure Statement:

1. ☒ Preliminary Statements
2. ☒ Copies of Forms PTO/SB/08A and 08B (substitute for Form PTO-1449) as filed in U.S. Application No. 09/947,199 filed on September 5, 2001
3. ☒ Identification of Prior Application in Which Listed Information Was Already Cited and for Which No Copies Are Submitted or Need Be Submitted

Preliminary statements

Applicants submit herewith patents, publications or other information, of which they are aware that they believe may be material to the examination of this application, and in respect of which, there may be a duty to disclose.

CERTIFICATION UNDER 37 C.F.R. SECTIONS 1.8(a) and 1.10*

I hereby certify that, on the date shown below, this correspondence is being:

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Practitioner's Docket No. MPI98-105P1RCP2DV1M

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 C.F.R. section 1.97(g)), an admission that the information cited is, or is considered to be, material to patentability, or that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13-25, at 25.

**Identification of Prior Application in Which Listed Information Was Already Cited and for Which
No Copies Are Submitted or Need Be Submitted**

This application relies, under 35 U.S.C. section 120, on the earlier filing date of prior U.S. Application Number 09/947,199, filed on September 5, 2001_(date).

The following references were submitted to, and/or cited by, the Office in the prior application(s) and, therefore, are not required to be provided in this application:

July 24, 2003

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By


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APPLICANT FACSIMILE OF FORM PTO-1449 REV 7-80	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO MNI-068CP2	SERIAL NO. 09/947,199
LIST OF PUBLICATIONS CITED BY APPLICANT (Use several sheets if necessary)		APPLICANT RAJU, Jeyaseelan	
		FILING DATE September 5, 2001	GROUP 1652

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
A1	EP194006	04/92	EP			

OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

A2	Baumeister, A. et al. "Accumulation of muscle Ankyrin repeat protein transcript reveals local activation of primary myotube end compartments during muscle morphogenesis," <i>J. Cell. Biol.</i> , 139(5): 1231-1242 (1997);
A3	Bevan, M. et al. "Analysis of 1.9 Mb of contiguous sequence from chromosome 4 of <i>Arabidopsis thaliana</i> ," <i>Nature</i> , 391 (6666):485-488 (1998);
A4	Cairns, B.R. et al. "Order of action of components in the yeast pheromone response pathway revealed with a dominant allele of the STE11 kinase and the multiple phosphorylation of the STE7 kinase," <i>Genes Dev.</i> , 6 (7):1305-1318 (1992);
A5	Cannon, J.F. et al. "Characterization of <i>Saccharomyces cerevisiae</i> genes encoding subunits of cyclic AMP-dependent protein kinase," <i>Mol. Cell. Biol.</i> , 7 (8):2653-2663 (1987);
A6	Costigan, C. et al. "A synthetic lethal screen identifies SLK1, a novel protein kinase homolog implicated in yeast cell morphogenesis and cell growth," <i>Mol. Cell. Biol.</i> , 12 (3):1162-1178 (1992);
A7	Delcommenne, M. et al. "Phosphoinositide-3-OH kinase-dependent regulation of glycogen synthase kinase 3 and protein kinase B/AKT by the integrin-linked kinase," <i>PNAS USA</i> , 95:11211-11216 (1998);
A8	Eber, S.W. et al. "Ankyrin-1 mutations are a major cause of dominant and recessive hereditary spherocytosis," <i>Nat. Genet.</i> , 13 (2):214-218 (1996);
A9	Ebina, Y. et al. "The human insulin receptor cDNA: the structural basis for hormone-activated transmembrane signalling," <i>Cell</i> , 40 (4): 747-758 (1985);
A10	Fearon, K. et al. "Structure and function of MRP20 and MRP49, the nuclear genes for two proteins of the 54 S subunit of the yeast mitochondrial ribosome," <i>J. Biol. Chem.</i> , 267 (8): 5162-5170 (1992);
A11	Feng, X.-H., et al. "Cloning and characterization of a novel member of protein kinase family from soybean," <i>Biochim. Biophys. Acta</i> , 1172: 200-204 (1993);
A12	Gallagher, P.G. et al. "An alternate promoter directs expression of a truncated, muscle-specific isoform of the human ankyrin 1 gene," <i>J. Biol. Chem.</i> , 273(3):1339-1348 (1998);
A13	Goto, K. et al. "A 104-kDa diacylglycerol kinase containing ankyrin-like repeats localizes in the cell nucleus," <i>PNAS USA</i> , 93: 11196-11201 (1996);
Examiner _____ Date Considered _____	
*EXAMINER Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

APPLICANT FACSIMILE OF FORM PTO-1449 REV 7-80	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO MNI-068CP2	SERIAL NO. 09/947,199
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U.S. PATENT DOCUMENTS

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OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

B1	Hsu, S-C. et al. "Modulation of transcriptional regulation by LEF-1 in response to Wnt-1 signaling and association with beta-catenin," <i>Mol. Cell. Biol.</i> , 18(8): 4807-4818 (1998);		
B2	Hubbard, S.R. et al. "Crystal structure of the tyrosine kinase domain of the human insulin receptor," <i>Nature</i> , 372 (6508): 746-753 (1994);		
B3	Hwang, D.M. et al. "Analysis of expressed sequence tags from a fetal human heart cDNA library," <i>Genomics</i> , 30.(2): 293-298 (1995);		
B4	Irie,K., et al. "A new protein kinase, SSP31, modulating the SMP3 gene-product involved in plasmid maintenance in <i>Saccharomyces cerevisiae</i> ," <i>Gene</i> , 108 (1): 139-144 (1991);		
B5	Jeyaseelan, R. et al., "A novel cardiac-restricted target for doxorubicin; Carp, a nuclear modulator of gene expression in cardiac progenitor cells and cardiomyocytes," <i>J Biol Chem</i> , 272(36):22800-8 (1997);		
B6	Johnston, M. et al. "Complete nucleotide sequence of <i>Saccharomyces cerevisiae</i> chromosome VIII," <i>Science</i> , 265 (5181): 2077-2082 (1994);		
B7	Kariya, K et al. "An enhancer Core Element Mediates Stimulation of the Rat β -Myosin Heavy Chain Promoter by an α_1 Adrenergic Agonist and Activated β -Protein Kinase C in Hypertrophy of Cardiac Myocytes," <i>The Journal Of Biological Chemistry</i> , 269 (5) 3775-3782(1993);		
B8	Katoh, M., et al. "Cloning and characterization of MST, a novel (putative) serine/threonine kinase with SH3 domain," <i>Oncogene</i> , 10 (7): 1447-1451 (1995);		
B9	Laidlaw, S.M., et al. "Fowlpox virus encodes nonessential homologs of cellular alpha-SNAP, PC-1, and an orphan human homolog of a secreted nematode protein," <i>J. Virol.</i> , 72 (8): 6742-6751 (1998);		
B10	Lambert, S., et al. "cDNA sequence for human erythrocyte ankyrin," <i>Proc. Natl. Acad. Sci. U.S.A.</i> , 87 (5): 1730-1734 (1990);		
B11	Lee, K.S. et al. "Dominant mutations in a gene encoding a putative protein kinase (BCK1) bypass the requirement for a <i>Saccharomyces cerevisiae</i> protein kinase C homolog," <i>Mol. Cell. Biol.</i> , 12 (1): 172-182 (1992);		
B12	Liszewicz, J., et al. "Isolation and nucleotide sequence of a <i>Saccharomyces cerevisiae</i> protein kinase gene suppressing the cell cycle start mutation <i>cdc25</i> ," <i>J. Biol. Chem.</i> , 262 (6): 2549-2553 (1987);		
B13	Lux, S.E. et al. "Analysis of cDNA for human erythrocyte ankyrin indicates a repeated structure with homology to tissue-differentiation and cell-cycle control proteins," <i>Nature</i> , 344 (6261): 36-42 (1990);		
B14	Miosga, T, et al. "Sequence and function analysis of a 9.74 kb fragment of <i>Saccharomyces cerevisiae</i> chromosome X including the BCK1 gene," <i>Yeast</i> , 10 (11): 1481-1488 (1994);		
B15	Mohammadi, M. et al. "Structure of the FGF receptor tyrosine kinase domain reveals a novel autoinhibitory mechanism," <i>Cell</i> , 86 (4): 577-587 (1996);		
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C1	Novak, A. et al. "Cell adhesion and the integrin-linked kinase regulate the LEF-1 and beta-catenin signaling pathways," <i>PNAS USA</i> , 95: 4374-4379 (1998);
C2	Otsuka, A.J. et al. "An ankyrin-related gene (unc-44) is necessary for proper axonal guidance in <i>Caenorhabditis elegans</i> ," <i>J. Cell Biol.</i> , 129 (4): 1081-1092 (1995);
C3	Otto, E. et al. "Isolation and characterization of cDNAs encoding human brain ankyrins reveal a family of alternatively spliced genes," <i>J. Cell Biol.</i> , 114 (2): 241-253 (1991);
C4	Percival-Smith, A. et al. "Characterization and mutational analysis of a cluster of three genes expressed preferentially during sporulation of <i>Saccharomyces cerevisiae</i> ," <i>Mol. Cell. Biol.</i> , 6 (7): 2443-2451 (1986);
C5	Radeva, G. et al. "Overexpression of the integrin-linked kinase promotes anchorage-independent cell cycle progression," <i>J. Biol. Chem.</i> , 272(21): 13937-13944 (1997);
C6	Rhodes, N. et al. "STE11 is a protein kinase required for cell-type-specific transcription and signal transduction in yeast," <i>Genes Dev.</i> , 4 (11): 1862-1874 (1990);
C7	Russo, A.A. et al. "Structural basis of cyclin-dependent kinase activation by phosphorylation," <i>Nat. Struct. Biol.</i> , 3 (8): 696-700 (1996);
C8	Saito, H. et al. "Regulation of a novel gene encoding a lysyl oxidase-related protein in cellular adhesion and senescence," <i>J. Biol. Chem.</i> , 272(13):8157-8160 (1997);
C9	Sheffield, V.C. et al. "Identification of a complex congenital heart defect susceptibility locus by using DNA pooling and shared segment analysis," <i>Human Molecular Genetics</i> , 6(1); 117-121 (1997);
C10	Sicheri, F. et al. "Crystal structure of the Src family tyrosine kinase Hck," <i>Nature</i> , 385:602-609 (1997);
C11	Sivasubramanian, N. et al., Cardiac myotrophin exhibits rel/NF-kB interacting activity in vitro," <i>J. Biol. Chem.</i> , 271(5): 2812-2816 (1996);
C12	Somers, S.S. et al. "Comparison of transforming growth factor beta and a human tumour-derived suppressor factor," <i>Cancer Immunology Immunotherapy</i> , 33:217-22 (1991);
C13	Tan, J.L. et al. "Developmentally regulated protein-tyrosine kinase genes in <i>Dictyostelium discoideum</i> ," <i>Mol. Cell. Biol.</i> , 10: 3578-3583 (1990);
C14	Tanaka, T. et al. "Construction of a Normalized Directionally Cloned cDNA Library from Adult Heart and Analysis of 3040 Clones by Partial Sequencing," <i>Genomics</i> , 35: 231-235 (1996);
C15	Tse, W.T. et al. "Isolation and chromosomal localization of a novel nonerythroid ankyrin gene," <i>Genomics</i> , 10 (4): 858:866 (1991);
C16	Toda, T. et al. "Three different genes in <i>S.cerevisiae</i> encode the catalytic subunits of the cAMP-dependent protein kinase," <i>Cell</i> , 50: 277-287 (1987);
C17	Jeffrey, P.D. et al. "Mechanism of CDK activation revealed by the structure of a cyclinA-CDK2 complex," <i>Nature</i> , 376:313-320 (1995);

Examiner

Date Considered

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FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

D1	Vandenbol, M. et al. "Sequencing and analysis of a 20.5 kb DNA segment located on the left arm of yeast chromosome XI," <i>Yeast</i> , 10 Suppl A: S25-S33 (1994);
D2	Xu, W. et al. "Three-dimensional structure of the tyrosine kinase c-Src," <i>Nature</i> , 385 (6617): 595-602 (1997);
D3	White, R.A. et al. "Murine erythrocyte ankyrin cDNA: highly conserved regions of the regulatory domain," <i>Mamm. Genome</i> , 3 (5): 281-285 (1992);
D4	Wilson, R. et al. "2.2 Mb of contiguous nucleotide sequence from chromosome III of <i>C. elegans</i> ," <i>Nature</i> , 368 (6466): 32-38 (1994);
D5	Wu, L.C. et al. "Identification of a RING protein that can interact in vivo with the BRCA1 gene product," <i>Nature Genet.</i> , 14 (4): 430-440 (1996);
D6	Wu, C. et al. "Integrin-linked protein kinase regulates fibronectin matrix assembly, E-cadherin expression, and tumorigenicity," <i>J. Biol. Chem.</i> , 273(1): 528-536 (1998);
D7	Zou, Y. et al. "CARP, a cardiac ankyrin repeat protein, is downstream in the Nkx2-5 homeobox gene pathway," <i>Development</i> , 124(4): 793-804 (1997)
D8	Copy of Blast® search (EST database) using the CARP2 nucleic acid sequence;
D9	Copy of Blast® search (NRN database) using the CARP2 nucleic acid sequence;
D10	Copy of Blast® search (NRP database) using the CARP2 amino acid sequence;
D11	Copy of Blast® search (Patent-2 database) using the CARP2 amino acid sequence;
D12	Copy of Blast® search (PDB database) using the CARP2 amino acid sequence;
D13	Copy of Blast® search (PDB database) using the CARP2 kinase domain amino acid sequence;
D14	Copy of Blast® search (Patent-2 database) using the CARP2 kinase domain amino acid sequence;

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	E1	Copy of Blast® search (Yeast database) using the CARP2 amino acid sequence;
	E2	Copy of Blast® search (Yeast database) using the CARP2 kinase domain amino acid sequence;
	E3	Copy of Blast® search (NRP database) using the CARP2-prot amino acid sequence;
	E4	Copy of Blast® search (NRP database) using the CARP2 kinase domain amino acid sequence;
	E5	Copy of Blast® search (NRP database) using the CARP2 kinase domain amino acid sequence;
	E6	Copy of Blast® search (Patent-2/gsprot database) using the rat Cark protein amino acid sequence;
	E7	Copy of Blast® search (Patent-2/Patent + DbPreviewNuc database) using The rat Cark cDNA nucleotide sequence;
	E8	Copy of Blast® search (Patent-2/gsnuc database) using the rat Cark cDNA nucleotide sequence;
	E9	Copy of Blast® search (NRN/nuc database) using the rat Cark cDNA nucleotide sequence;
	E10	Copy of Blast® search (NRP/protot database) using the rat Cark protein amino acid sequence;
	E11	Database Trembl., ac: q9y2v6, (1999) Wei, Y.J. et al., "Hypothetical 92.9 kD protein," XP002136301;
	E12	GenBank Accession Number 1942427, Chain A, Cyclin A - Cyclin-Dependent Kinase 2 Complex;
	E13	GenBank Accession Number 1942625, Chain A, Phosphorylated Cyclin-Dependent Kinase-2 Bound To Cyclin A;
	E14	GenBank Accession Number 2194103, Chain A, Src Family Kinase Hck-Amp-Pnp Complex;
	E15	GenBank Accession Number 2392334; chain A, crystal structure of the tyrosine-protein kinase domain of fibroblast growth factor receptor 1;
	E16	GenBank Accession Number OKBYC1; Protein Kinase (EC 2.7.1.37), Camp-dependent, catalytic chain 1-yeast;
	E17	GenBank Accession Number 2392337 for crystal structure of human tyrosine-protein kinase c-src;
Examiner		Date Considered
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.		

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FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

F1	GenBank Accession Number 999510 for insulin receptor (tyrosine kinase domain) mutant with cys 981 replaced by ser and tyr 984 replaced by phe;
F2	GenBank Accession Number A35670; Protein-tyrosine kinase (EC 2.7.1.112) l-slime mold (dictyostelium discoideum);
F3	GenBank Accession Number AA758546; ah70b01.s1 Soares_testis_NHT Homo sapiens cDNA clone 1320937 3', mRNA sequence
F4	GenBank Accession Number AA389675, M186 Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5';
F5	GenBank Accession Number AA938871; OP74ALL.S1 Soares_NFL_T_GBC_S1 Homo Sapiens cDNA clone image: 1582556 3';
F6	GenBank Accession Number 2781357; F2401.13;
F7	GenBank Accession Number AF024491; Caenorhabditis elegans cosmid C24A1;
F8	GenBank Accession Number AF068261; Rattus norvegicus pancreatic serine threonine kinase mRNA;
F9	GenBank Accession Number A1040439; ow16c03.x1 Soares_parathyroid_tumor_NbHPA Homo Sapiens cDNA clone image: 1646980 3' similar to WP:C24A1.3 CE08335;
F10	GenBank Accession Number A1289394; qw21h08.x1 NCI_CGAP_Ut4 Homo sapiens cDNA clone image:1991775 3';
F11	GenBank Accession Number A1333762; qp98h10.x1 Soares_fetal_lung_NbHL19W Homo Sapiens cDNA clone image: 1931107 3' similar to WP:C24A1.3 CE08335;
F12	GenBank Accession Number A1375137; tc09g12.x1 Soares_NhHMPu_S1 Homo Sapiens cDNA clone image: 2063398 3' similar to WP:C24A1.3 CE08335;
F13	GenBank Accession Number A1377988; te61c04.x1 Soares_NFL_T_GBC_S1 Homo Sapiens Sapiens cDNA clone image: 2091174 3'
F14	GenBank Accession Number AJ006408; Fowlpox virus strain ank2, ank3, snap, cell/dnasII and pc1 genes;
F15	GenBank Accession Number CAA20048; Putative protein;
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

APPLICANT FACSIMILE OF FORM PTO-1449 REV 7-80	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO MNI-068CP2	SERIAL NO. 09/947,199
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U.S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

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	G1	GenBank Accession Number AQ242835; HS_2061_A1_G12_T7 CIT Approved Human Genomic Sperm Library D Homo sapiens genomic clone Plate=2061 Col=23 Row=M;
	G2	GenBank Accession Number B35049; Ankyrin 1, erythrocyte form 3 – human;
	G3	GenBank Accession Number C03950; Human heart cDNA (YNakamura) Homo Sapiens cDNA clone 3NHC2459;
	G4	GenBank Accession Number D10389 ; Yeast DNA for Ssp31 protein kinase;
	G5	GenBank Accession Number M17074; Yeast (S.cerevisiae) cAMP-dependent kinase subunit (TPK3) gene;
	G6	GenBank Accession Number M33784; D.discoideum protein-tyrosine kinase-2 (DPYK2) mRNA;
	G7	GenBank Accession Number M33785; D.discoideum protein-tyrosine kinase-1 (DPYK1) mRNA;
	G8	GenBank Accession Number M67449; Glycine max protein kinase (PK6) mRNA, complete cds;
	G9	GenBank Accession Number P05986; Camp dependent protein kinase type 3 (PKA 3);
	G10	GenBank Accession Number P06244; Camp-dependent protein kinase type 1 (PKA 1) (CDC25 suppressing protein kinase) (PK-25);
	G11	GenBank Accession Number P08458; Sporulation-specific protein 1;
	G12	GenBank Accession Number P16157; Ankyrin R (Ankyrins 2.1 and 2.2) (Erythrocyte ankyrin);
	G13	GenBank Accession Number P18160; Non-receptor tyrosine kinase spore lysis A (Tyrosine-protein kinase 1);
	G14	GenBank Accession Number P23561; Serine/Threonine-protein kinase STE11;
	G15	GenBank Accession Number P38692; Serine/Threonine-protein kinase NRK1 (N-rich kinase 1);
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OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

H1	GenBank Accession Number Q01389; Serine/Threonine protein kinase BCK1/SLK1/SSP31;
H2	GenBank Accession Number Q01485; Ankyrin, brain variant 2 (Ankyrin B) (Ankyrin, Nonery throid);
H3	GenBank Accession Number Q02357; Ankyrin;
H4	GenBank Accession Number R57737; F5349 fetal heart Homo Sapiens cDNA clone F5349 5' end;
H5	GenBank Accession Number S51380; Protein kinase STE11 (EC 2.7.1.-) – yeast;
H6	GenBank Accession Number U01064; Dictyostelium discoideum AX2 protein tyrosine kinase mRNA;
H7	GenBank Accession Number U21734; Caenorhabditis Elegans ankyrin-related protein UNC-44 (unc-44) gene;
H8	GenBank Accession Number U39847; Caenorhabditis Elegans AO13 ankyrin, AO66 ankyrin and AO49 ankyrin (unc-44) gene, three alternatively spliced forms;
H9	GenBank Accession Number U50071; Caenorhabditis Elegans cosmid B0350;
H10	GenBank Accession Number X16609; Human mRNA for ankyrin (variant 2.1);
H11	GenBank Accession Number X56958; Homo Sapiens mRNA for ankyrin, Brank-2 protein;
H12	GenBank Accession Number X60227; S.Cerevisiae BCK1 gene for protein kinase;
H13	GenBank Accession Number Z48615; H.sapiens MST mRNA for serine/threonine kinase;
H14	GenBank Accession Number Z97337; Arabidopsis thaliana DNA chromosome 4, ESSA I contig fragment No. 2;
H15	GenBank Accession Number Z98551; Plasmodium falciparum MAL3P6.
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OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

	11	GenBank Accession Number U65916; Rattus Norvegicus ankyrin mRNA, membrane binding domain;
	12	GenBank Accession Number U76638; Human BRCA1-associated RING domain protein (BARD1) mRNA;
	13	GenBank Accession Number AAB70312; contains similarity to ankyrin repeats and protein kinase motifs;
	14	GenBank Accession Number AF116826; Homo sapiens clone HH498 putative protein-tyrosine kinase mRNA, complete cds;
	15	GenBank Accession Number AF116826_1; putative protein-tyrosine kinase
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